The Claims

1. (Original) A method for reserving conference resources for a multipoint conference, comprising:

receiving a request for a multipoint conference reservation;

receiving a list of participants;

predicting communication paths for a plurality of the participants;

estimating a multipoint control unit resource requirement;

selecting a first multipoint control unit to host the multipoint conference;

determining availability of the multipoint control unit resource requirement at approximately a scheduled start time and for a duration of the multipoint conference; and

selecting a second multipoint control unit to host the multipoint conference, if the first multipoint control unit does not have the multipoint control unit resource requirement available at the scheduled start time.

2. (Original) The method of Claim 1, wherein the multipoint control unit resource requirement comprises a digital signal processor resource requirement.

3. (Original) The method of Claim 1, wherein the multipoint control unit resource requirement comprises a communication port requirement.

4. (Previously presented) The method of Claim 1, further comprising reserving the multipoint control unit resource requirement of the first multipoint control unit for the multipoint conference, if the multipoint control unit resource requirement is available.

5. (Previously presented) The method of Claim 4, wherein the multipoint control unit resource requirement comprises gateway port requirements.

6. (Previously presented) The method of Claim 4, wherein the multipoint control unit resource requirement comprises digital signal processor requirements of a digital signal processor farm.

7. (Original) The method of Claim 1, further comprising requesting an alternative estimated start time if the second multipoint control unit does not include the multipoint control unit resource requirement at approximately the scheduled start time.

8. (Previously presented) The method of Claim 1, further comprising:

estimating corresponding network resource requirements associated with a plurality of the communication paths;

selecting a first communication path of the plurality of the communication paths;

determining availability of the estimated corresponding network resource requirements associated with the first communication path; and

selecting a third multipoint control unit if the first communication path does not include the estimated corresponding network resource requirements at approximately the scheduled start time.

9. (Previously presented) The method of Claim 8, further comprising:

selecting a second communication path of the plurality of the communication paths if the first communication path does not include the estimated corresponding network resource requirements at approximately the scheduled start time; and

selecting a fourth multipoint control unit if the second communication path does not include the estimated corresponding network resource requirements.

10. (Previously presented) The method of Claim 9, further comprising determining availability of the network resource requirements associated with each of the plurality of the communication paths.

11. (Previously presented) The method of Claim 10, further comprising selecting a fifth multipoint control unit if any of the plurality of the communication paths do not include the corresponding network resource requirements.

12. (Original) The method of Claim 1, wherein the communication paths are predicted using RSVP PATH messages.

13. (Previously presented) A method for reserving network resources for a multipoint conference, comprising:

receiving a request for a multipoint conference reservation;

receiving a list of participants;

selecting a first multipoint control unit to host the multipoint conference;

predicting communication paths associated with a plurality of the participants;

estimating corresponding network resource requirements associated with a plurality of the communication paths;

selecting a first communication path of the plurality of communication paths;

determining availability of the estimated network resource requirements associated with the first communication path at approximately a scheduled start time and for an estimated duration of the multipoint conference reservation; and

selecting a second multipoint control unit to host the multipoint conference if the first communication path does not include the estimated corresponding network resource requirements at approximately the scheduled start time and for the estimated duration.

14. (Previously presented) The method of Claim 13, wherein the corresponding network resource requirements comprise bandwidth.

15. (Previously presented) The method of Claim 13, wherein the corresponding network resource requirements comprise gateway port requirements.

16. (Previously presented) The method of Claim 13, wherein the corresponding network resource requirements comprise digital signal processor resource requirements of a digital signal processor farm.

17. (Previously presented) The method of Claim 13, further comprising reserving the corresponding network resource requirements associated with the first communication path for the multipoint conference, if the network resource requirement is available.

18. (Previously presented) The method of Claim 14, further comprising:

selecting a second communication path of the plurality of the communication paths if the first communication path includes the estimated corresponding network resource requirements at approximately the scheduled start time; and

selecting a third multipoint control unit if the second communication path does not include the estimated corresponding network resource requirements.

19. (Previously presented) The method of Claim 14, further comprising determining availability of the corresponding network resource requirements along each of the plurality of the communication paths.

20. (Previously presented) The method of Claim 19, further comprising selecting a fourth multipoint control unit if any of the plurality of the communication paths do not include the corresponding network resource requirement.

21. (Original) The method of Claim 14, wherein the communication paths are predicted using RSVP PATH messages.

22. (Original) The method of Claim 14, further comprising:

reserving a pool of bandwidth for high priority request; and

allocating available bandwidth from the pool according to a predetermined priority scheme.

23. (Original) The method of Claim 22, wherein the predetermined priority scheme is established according to a type of multipoint conference requested.

24. (Original) The method of Claim 22, wherein the predetermined priority scheme is established according to an identity of a requestor of the multipoint conference.

25. (Original) The method of Claim 22, wherein the predetermined priority scheme is established according to a plurality of unique identifiers corresponding to a plurality of the participants, respectively; and

the available bandwidth is allocated to high priority participants until all high priority participant request are processed.

26. (Original) An apparatus for reserving conference resources for a multipoint conference, comprising:

a server operable to receive a request for a multipoint conference reservation and a list of participants; and

the server being further operable to:

predict communication paths for a plurality of the participants;

estimate a digital signal processor resource requirement for the multipoint conference;

select a first multipoint control unit to host the multipoint conference;

determine availability of the digital signal processor resource requirement at approximately a scheduled start time and for an estimated duration of the multipoint conference; and

select a second multipoint control unit to host the multipoint conference, if the first multipoint control unit does not have the digital signal processor resource requirement available at the scheduled start time and for the estimated duration.

27. (Original) The apparatus of Claim 26, wherein the server is further operable to reserve the digital signal processor resource requirement from the first multipoint control unit for the multipoint conference, if the digital signal processor resource requirement is available.

28. (Previously presented) The apparatus of Claim 26, wherein the server is further operable to:

estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

select a first communication path of the plurality of communication paths;

determine availability of the estimated bandwidth requirement associated with the first communication path; and

select a third multipoint control unit if the first communication path does not include the associated bandwidth requirement at approximately the scheduled start time and for the estimated duration.

29. (Previously presented) An apparatus for reserving network resources for a multipoint conference, comprising:

a server operable to receive a request for a multipoint conference reservation, and a list of participants; and

the server being further operable to:

select a first multipoint control unit to host the multipoint conference;

predict communication paths associated with a plurality of the participants;

estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

select a first communication path of the plurality of communication paths;

determine availability of the estimated bandwidth requirement associated with the first communication path at approximately a scheduled start time and for an estimated duration of the multipoint conference reservation; and

select a second multipoint control unit to host the multipoint conference if the first communication path does not include the estimated bandwidth requirement at approximately the scheduled start time and for the estimated duration.

30. (Original) The apparatus of Claim 29, further comprising:

memory operable to reserve the bandwidth requirement associated with the first communication path if the bandwidth requirement associated with the first communication path is available.

31. (Previously presented) The apparatus of Claim 29, wherein the server is further operable to:

select a second communication path of the plurality of the communication paths if the first communication path includes the estimated bandwidth requirement at approximately the scheduled start time and for the estimated duration; and

select a third multipoint control unit if the second communication path does not include the estimated bandwidth requirement.

32. (Original) The apparatus of Claim 29, wherein the server is further operable to:

reserve a pool of bandwidth for high priority multipoint conference request; and

allocate available bandwidth from the pool according to a predetermined priority scheme.

33. (Previously presented) Logic encoded in computer readable media for reserving a network resource for a multipoint conference, the logic operable to perform the following steps:

receive a request for a multipoint conference reservation;

receive a list of participants;

predict communication paths for a plurality of the participants;

estimate a digital signal processor resource requirement for the multipoint conference;

select a first multipoint control unit to host the multipoint conference;

determine availability of the digital signal processor resource requirement at approximately a scheduled start time and for an estimated duration of the multipoint conference; and

select a second multipoint control unit to host the multipoint conference, if the first multipoint control unit does not have the digital signal processor resource requirement available at the scheduled start time and for the estimated duration.

34. (Previously presented) The logic encoded in computer readable media of Claim 33, wherein the logic is further operable to reserve the digital signal processor resource requirement from the first multipoint control unit for the multipoint conference, if the digital signal processor resource requirement is available.

35. (Previously presented) The logic encoded in computer readable media of Claim 33, wherein the logic is further operable to:

estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

select a first communication path of the plurality of the communication paths;

determine availability of the estimated bandwidth requirement associated with the first communication path; and

select a third multipoint control unit if the first communication path does not include the associated bandwidth requirement at approximately the scheduled start time and for the estimated duration.

36. (Previously presented) Logic encoded in computer readable media for reserving network resources for a multipoint conference, the logic operable to perform the following steps:

receive a request for a multipoint conference reservation, and a list of participants;

select a first multipoint control unit to host the multipoint conference;

predict communication paths associated with a plurality of the participants;

estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

select the first communication path of the plurality of the communication paths;

determine availability of the estimated bandwidth requirement associated with the first communication path at approximately a scheduled start time and for an estimated duration of the multipoint conference reservation; and

select a second multipoint control unit to host the multipoint conference if the first communication path does not include the estimated bandwidth requirement at approximately the scheduled start time and for the estimated duration.

37. (Previously presented) The logic encoded in computer readable media of Claim 36, wherein the logic is further operable to reserve the bandwidth requirement associated with the first communication path if the bandwidth requirement associated with the first communication path is available.

38. (Previously presented) The logic encoded in computer readable media of Claim 36, wherein the logic is further operable to:

select a second communication path of the plurality of the communication paths if the first communication path includes the estimated bandwidth requirement at approximately the scheduled start time; and

select a third multipoint control unit if the second communication path does not include the estimated bandwidth requirement.

39. (Previously presented) The logic encoded in computer readable media of Claim 36, wherein the logic is further operable to:

reserve a pool of bandwidth for high priority multipoint conference request; and

allocate available bandwidth from the pool according to a predetermined priority scheme.

40. (Previously presented) An apparatus for reserving conference resources for a multipoint conference, comprising:

means for receiving a request for a multipoint conference reservation, and a list of participants;

means for predicting communication paths for a plurality of the participants;

means for estimating a digital signal processor resource requirement for the multipoint conference;

means for selecting a first multipoint control unit to host the multipoint conference;

means for determining availability of the digital signal processor resource requirement at approximately a scheduled start time and for an estimated duration of the multipoint conference; and

means for selecting a second multipoint control unit to host the multipoint conference if the first multipoint control unit does not have the digital signal processor resource requirement available at the scheduled start time and for the estimated duration.

41. (Original) The apparatus of Claim 40, further comprising means for reserving the digital signal processor resource requirement from the first multipoint control unit for the multipoint conference, if the digital signal processor resource requirement is available.

42. (Previously presented) The apparatus of claim 40, further comprising:

means for estimating corresponding bandwidth requirements associated with a plurality of the communication paths;

means for selecting a first communication path of the plurality of communication paths;

means for determining availability of the estimated bandwidth requirements associated with the first communication path; and

means for selecting a third multipoint control unit if the first communication path does not include the associated bandwidth requirement at approximately the scheduled start time.

43. (Previously presented) An apparatus for reserving network resources for a multipoint conference, comprising:

means for receiving a request for a multipoint conference reservation, and a list of participants;

means for selecting a first multipoint control unit to host the multipoint conference;

means for predicting communication paths associated with a plurality of the participants;

means for estimating corresponding bandwidth requirements associated with a plurality of the communication paths;

means for selecting a first communication path of the plurality of the communication paths;

means for determining availability of the estimated bandwidth requirement associated with the first communication path; and

means for selecting a second multipoint control unit to host the multipoint conference if the first communication path does not include the estimated bandwidth requirement at approximately the scheduled start time.

44. (Original) The apparatus of Claim 43, further comprising means for reserving the bandwidth requirement associated with the first communication path if the bandwidth requirement associated with the first communication path is available.

45. (Previously presented) The apparatus of Claim 43, further comprising:

means for selecting a second communication path of the plurality of the communication paths if the first communication path includes the estimated bandwidth requirement at approximately the scheduled start time; and

means for selecting a third multipoint control unit if the second communication path does not include the estimated bandwidth requirement.